

Ch. 4.1 p. 216

MATRIX - NUMBERS ARRANGED
IN ORDER (IN ROWS
AND COLUMNS)

MATRICES (PL)

COLUMNS

$$\begin{bmatrix} 4 & 7 & 0 \\ -31 & 15 & 2 \end{bmatrix} \leftarrow \text{ROW}$$

2 ROWS AND
3 COLUMNS

DIMENSION OF A MATRIX
TELLS US NUMBER OF ROWS
AND COLUMNS

2×3
 $\downarrow \quad \uparrow$
ROWS COLUMNS

EACH NUMBER IN A MATRIX -
ENTRY OR ELEMENT

TWO MATRICES ARE EQUAL IF
THE CORRESPONDING ELEMENTS
ARE EQUIVALENT

$$\begin{bmatrix} 4x+5 & 9 & 15 \\ 7 & -2y+3 & -1 \end{bmatrix} = \begin{bmatrix} 21 & 9 & 15 \\ 7 & y-12 & -1 \end{bmatrix}$$

$$4x+5=21$$

$$-5 \quad -5$$

$$4x=16 \quad x=4$$

$$-2y+3=y-12$$

$$+2y$$

$$+2y$$

$$3=3y-12$$

$$15=3y$$

$$y=5$$

p. 221 #6

$$x + 8 = 14 - x$$

$$x$$

$$2y - 1 = -13 - y$$

$$y =$$

$$7a \quad 3 \times 2$$

MATRIX A = R

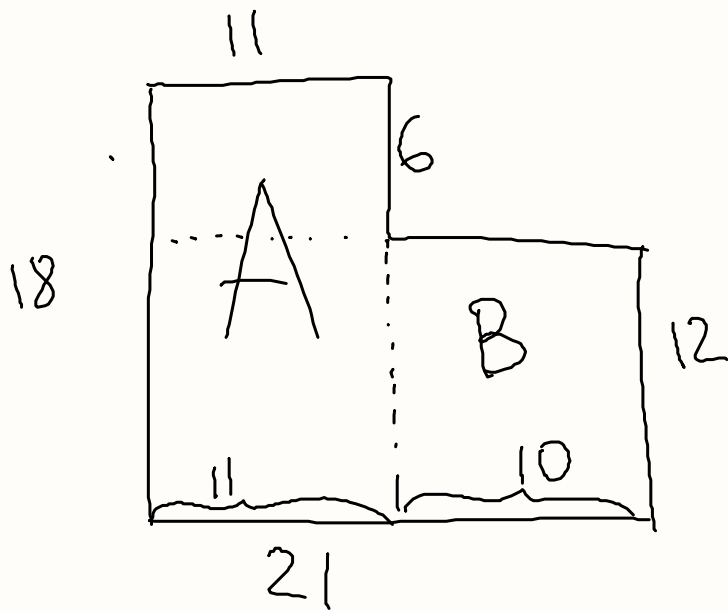
MATRIX B = S

HOME

p. 221 12-16 even

p. 222 24, 28, 30, 34

p. 170 WORK ON THE
PROBLEM 1 AND
ANOTHER EXAMPLE.



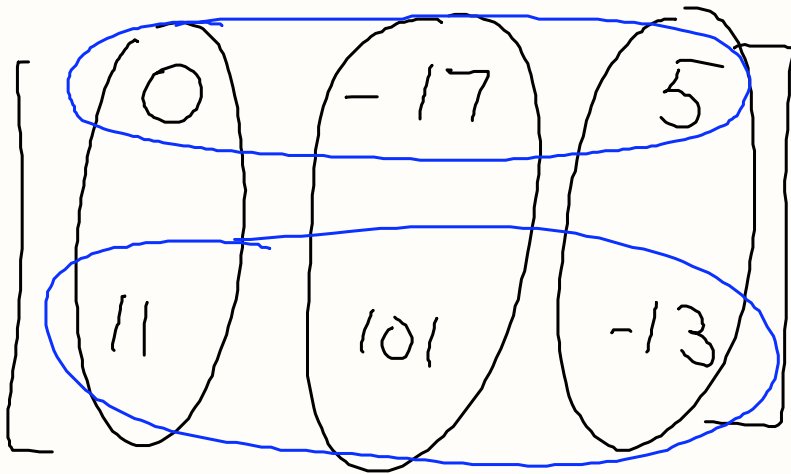
$$A : 18 \times 11 = 198$$

$$B : 10 \times 12 = 120$$

$$418$$

Ch.4.1

MATRIX - NUMBERS ARRANGED
IN ORDER (ROWS AND COLUMNS)



A hand-drawn diagram of a 2x3 matrix. The matrix is enclosed in large square brackets. Inside, there are two rows and three columns. Each cell contains a number. The first row contains 0, -17, and 5. The second row contains 11, 101, and -13. Blue ovals are drawn around each row, and blue vertical ovals are drawn around each column, illustrating the structure of the matrix.

0	-17	5
11	101	-13

ROWS (2)

COLUMNS (3)
DIMENSION (2x3)

EACH MATRIX HAS ENTRY (ELEMENT)

TWO MATRICES ARE EQUAL
WHEN CORRESPONDING
ELEMENTS ARE EQUIVALENT

$$\begin{bmatrix} 4x+5 & 9 & 15 \\ 7 & -2y+3 & -1 \end{bmatrix} = \begin{bmatrix} 21 & 9 & 15 \\ 7 & y-12 & -1 \end{bmatrix}$$

$4 \cdot 4 + 5 = 21$

$4x+5=21$
 $-5 \quad -5$
 $4x=16 \quad x=4$

$-2y+3 = y-12$
 $+2y \quad +2y$
 $3 = 3y-12$
 $y=5$

$-2 \cdot 5 + 3 = -7$
 $5 - 12 = -7$

#6

$$x+8=14-x$$

$$x=$$

$$2y-1=-13-y$$

$$y=$$

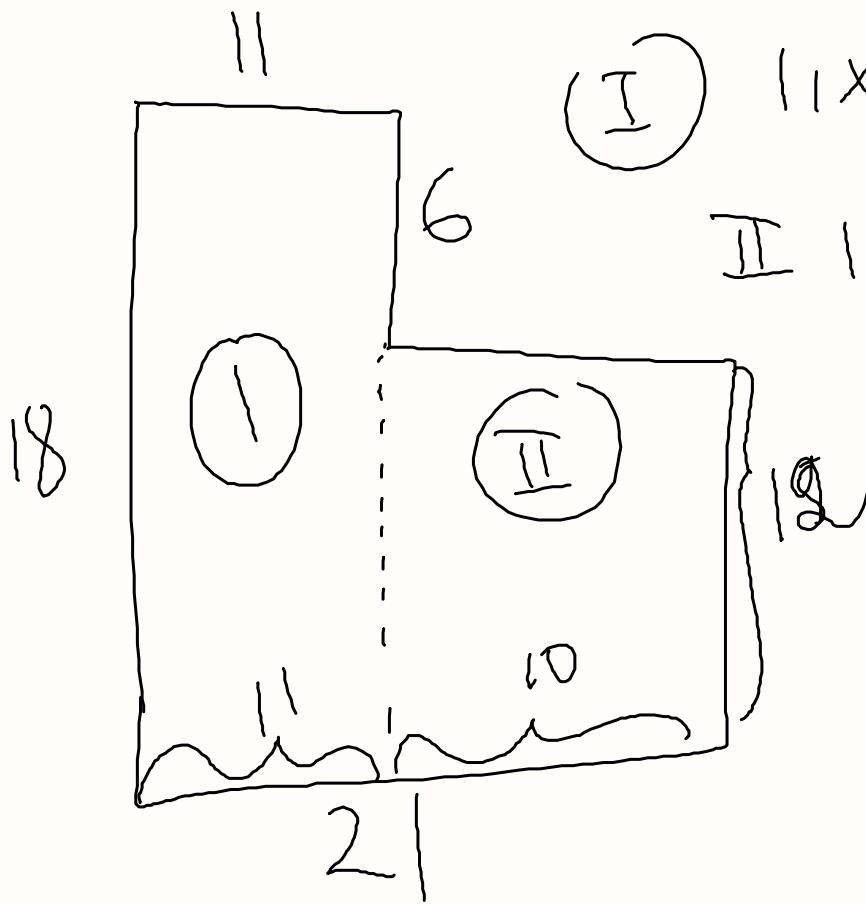
(7a)

call matrix R $AS[A]$

call matrix S $AS[B]$

HDMÉ p.221 #12-16 even.
p.222 #24, 28, 30,
34

GEDM #1 p.120
#2 p.121

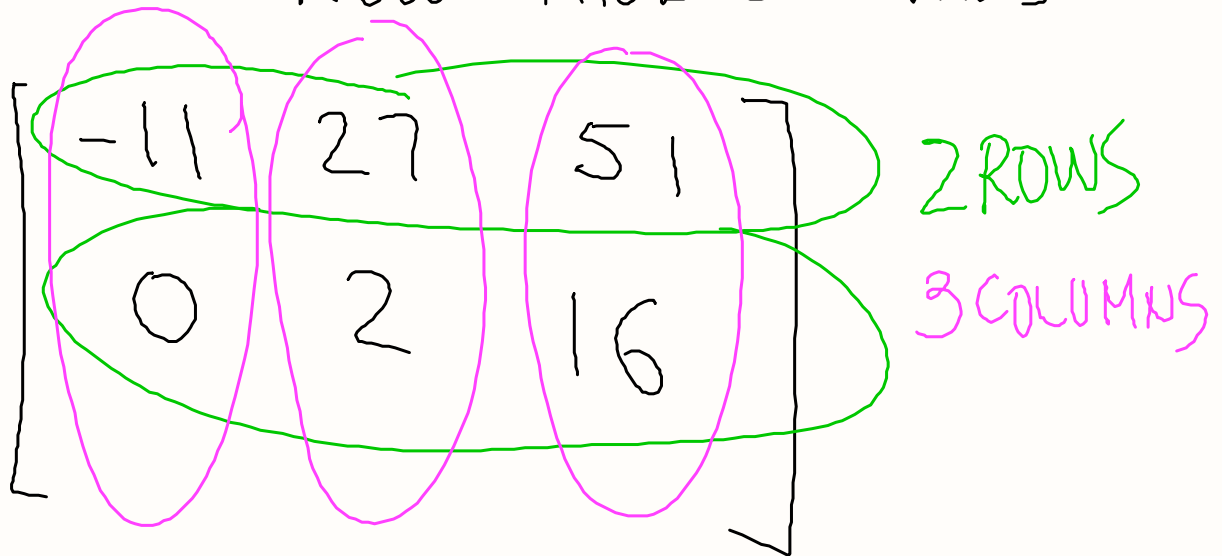


(I) $11 \times 18 = 198$

II $10 \times 12 = 120$
318

CH. 4.1

MATRIX - ARRANGEMENT
OF NUMBERS BY
ROWS AND COLUMNS



-11	27	51
0	2	16

2 ROWS

3 COLUMNS

EACH NUMBER IN A MATRIX
IS AN ENTRY (ELEMENT)

DIMENSION OF A MATRIX
dim TELLS NUMBER
OF ROWS AND COLUMNS

$\text{dim}(2 \times 3)$
Rows Columns

TWO MATRICES ARE EQUAL
WHEN CORRESPONDING ENTRIES
ARE EQUIVALENT

$$\begin{bmatrix} 4x+5 & 9 & 15 \\ 7 & -2y+3 & -1 \end{bmatrix} = \begin{bmatrix} 21 & 9 & 15 \\ 7 & y-12 & -1 \end{bmatrix}$$

$4x+5 = 21$
 $4 \cdot 4 + 5 = 21$
 $7 = 7$
 $-2y+3 = y-12$
 $-2 \cdot 5 + 3 = -7$
 $4x+5 = 21$
 $-5 \quad -5$
 $4x = 16$
 $x = 4$

$-2y+3 = y-12$
 $+2y \quad +2y$
 $3 = 3y - 12$
 $+12 \quad +12$
 $15 = 3y \quad y = 5$

p. 221 #6

$$\begin{array}{r} X+8=14 \\ +X \end{array}$$

$$\begin{array}{r} 2X+8=14 \\ -8 \quad -8 \\ \hline 2X=6 \\ \underline{X=3} \end{array}$$

7a, b

dim (3x2)

call R matrix [A]

S matrix [B]

$$2y-1=-13-y$$

$$\begin{array}{r} 2y=-12-y \\ +y \end{array}$$

$$\begin{array}{r} 3y=-12 \\ y=-4 \end{array}$$

HOME

p.221 #12-16 even

p.222 #24,28,30,34

GEDM PSSA

#1 p.120

#2 p.121

